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Attorney Docket No. 06816/051001/SCH

### ACTIVE PIXEL SENSOR ARRAY WITH SIMPLE FLOATING GATE PIXELS

### Abstract of the Disclosure:

An imaging device formed as a monolithic complementary metal oxide semiconductor integrated circuit in an industry standard complementary metal oxide semiconductor process, the integrated circuit including a focal plane array of pixel cells, each one of the cells including a photogate overlying the substrate for accumulating photo-generated charge in an underlying portion of the substrate and a charge coupled device section formed on the substrate adjacent the photogate having a sensing node and at least one charge coupled device stage for transferring charge from the underlying portion of the substrate to the sensing node. There is also a readout circuit, part of which can be disposed at the bottom of each column of cells and be common A Simple Floating Gate to all the cells in the column. (SFG) pixel structure could also be employed in the imager to provide a non-destructive readout and smaller pixel sizes.

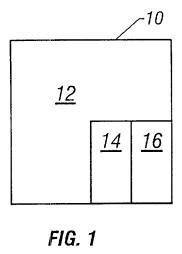
8951.L11

## UNITED STATES PATENT AND TRADEMARK OFFICE DOCUMENT CLASSIFICATION BARCODE SHEET



## **Drawings**

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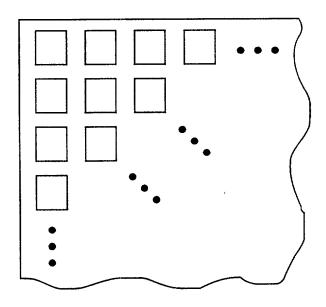
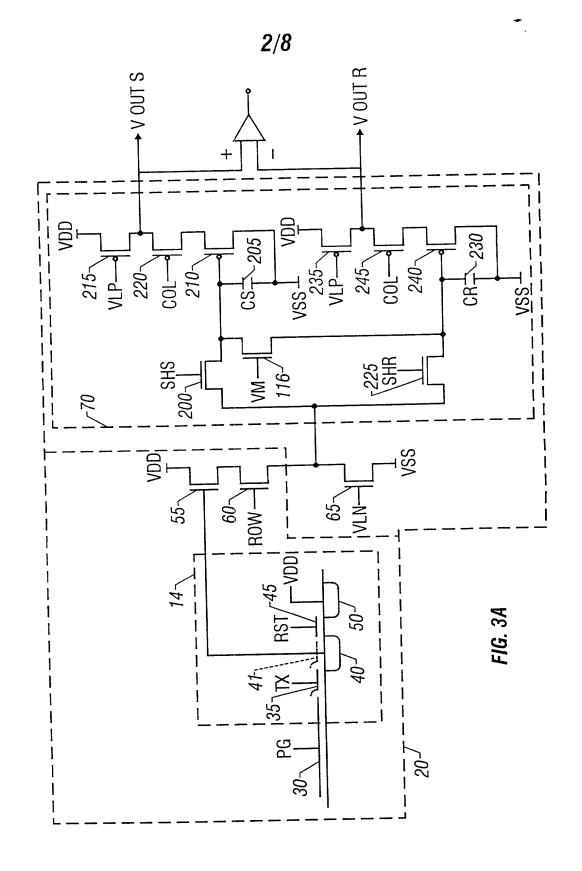
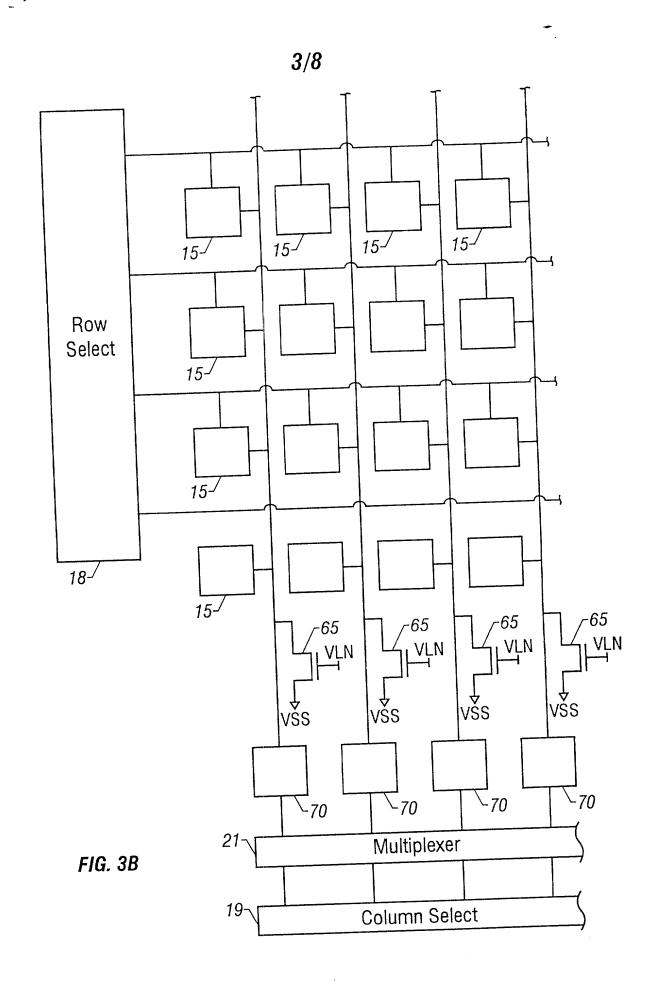


FIG. 2





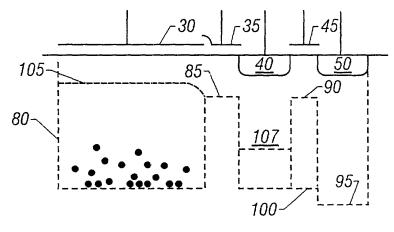


FIG. 4

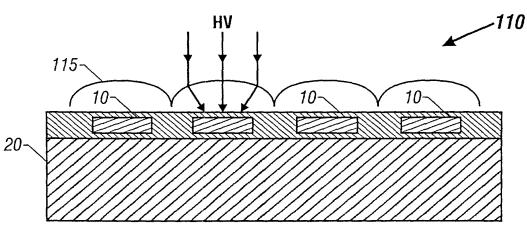
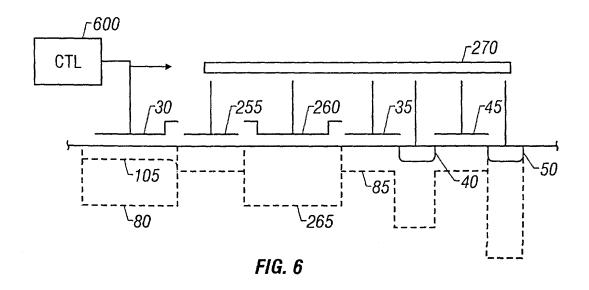


FIG. 5



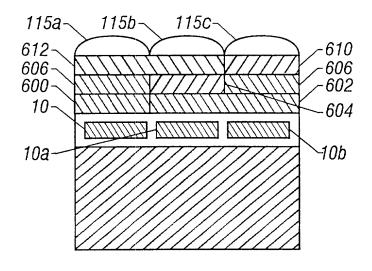
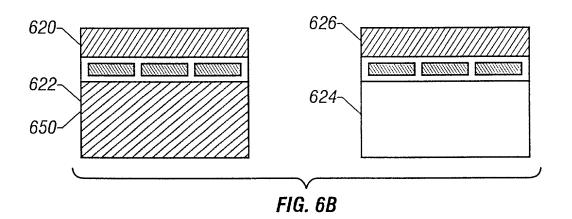


FIG. 6A



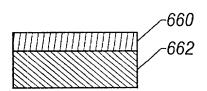
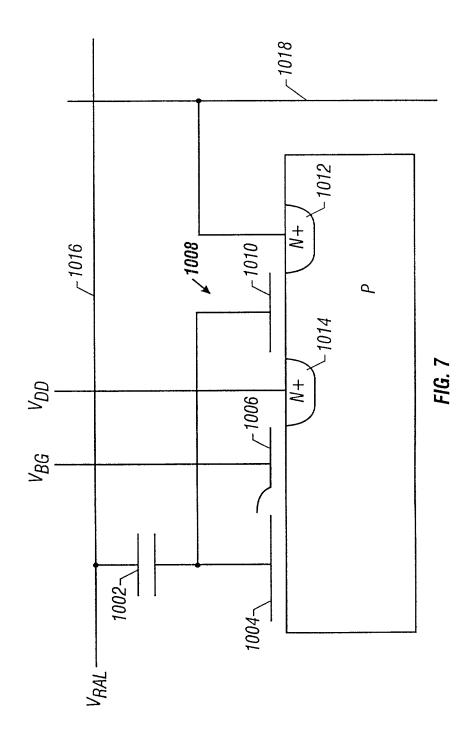
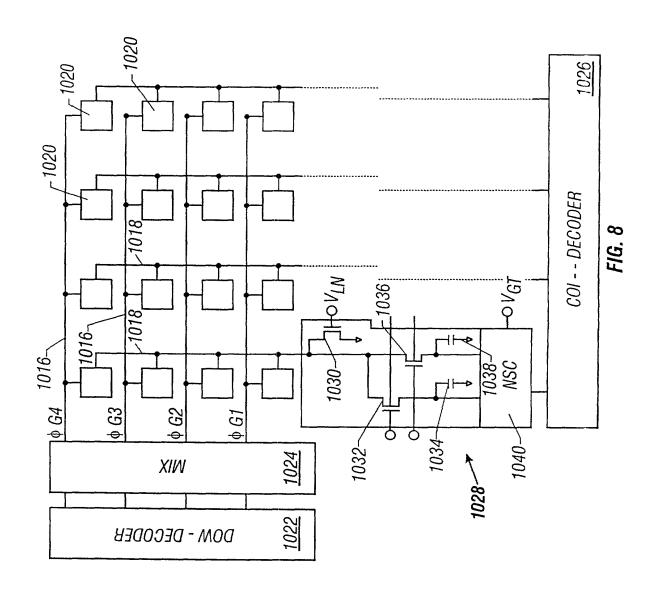
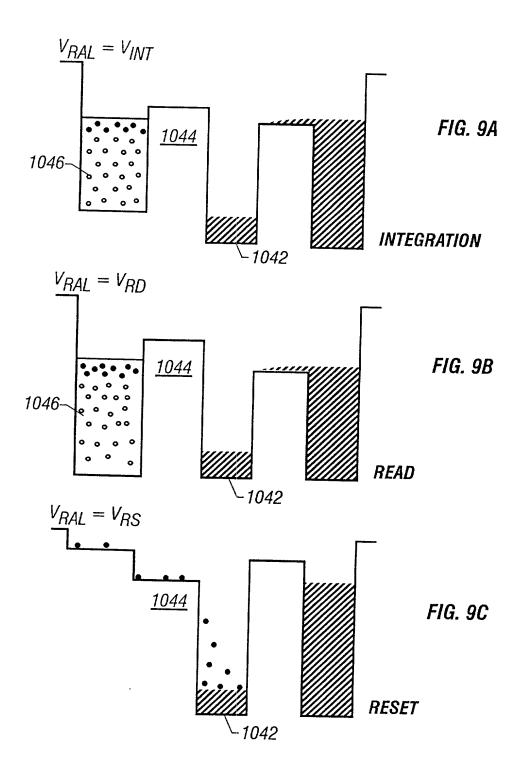


FIG. 6C











# Oath/Declaration, Small Entity, and Power of Attorney

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### ATTORNEY DOCKET NO: 06816/051001

CIT 2247-2A

#### COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ACTIVE PIXEL SENSOR ARRAY WITH SIMPLE FLOATING GATE PIXELS, the specification of which

is attached was filed or		Application Serial No.08/785,931 and was amended on
☐ was describ	·	International Application Noamended under
		d understand the contents of the above-identified specification, dment referred to above.
	the duty to disclose all Federal Regulations, §1	information I know to be material to patentability in accordance 1.56.
listed below and, insofa prior United States app §112, I acknowledge th Title 37, Code of Feder	ar as the subject matter lication in the manner pare duty to disclose all in ral Regulations, §1.56(a	35, United States Code, §120 of any United States application(s) of each of the claims of this application is not disclosed in the provided by the first paragraph of Title 35, United States Code, aformation I know to be material to patentability as defined in (a) which became available between the filing date of the prior hal filing date of this application:
U.S. SERIAL NO.	FILING DATE	STATUS
08/558,521	11/16/95	■ Pending □ Issued □ Abandoned
08/188,032	01/28/94	■ Pending □ Issued □ Abandoned
I hereby claim provisional application(		35, United States Code, §119(e)(1) of any United States
60/010,305	01/22/96	■ Pending □ Issued □ Abandoned
60/013,700	03/20/96	■ Pending □ Issued □ Abandoned

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Scott C. Harris, Reg. No. 32,030; William J. Egan, III, Reg. No. 28,411; David L. Feigenbaum, Reg. No. 30,378; John F. Land, Reg. No. 29,554; Ralph A. Mittelberger, Reg. No. 33,195; Hans R. Troesch, Reg. No. 36,950 and John R. Wetherell, Jr., Reg. No. 31,678.

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Address all correspondence to Scott C. Harris, Fish & Richardson P.C., 4225 Executive Square, Suite 1400, La Jolla, CA 92037.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both,

### COMBINED DECLARATION AND POWER OF ATTOR Y CONTINUED

under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

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